PTC-1390 (Rev. 07-2005)
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| TRANSMITTAL LETTER TO THE UNITED STATES | 176/61623 | | | | | | | |
|---|--|--|--|--|--|--|--|--|
| DESIGNATED/ELECTED OFFICE (DO/EO/US) | U.S. APPLICATION NO. (If known, see 37 CFR 1.5) | | | | | | | |
| CONCERNING A SUBMISSION UNDER 35 U.S.C. 371 | 111/52/226 | | | | | | | |
| INTERNATIONAL APPLICATION NO. PCT/US2004/031866 INTERNATIONAL FILING DATE 29 September 2004 (29.09.2004) | | | | | | | | |
| TITLE OF INVENTION METHODS OF MODULATING CELL CYCLE AND CELL SIGNALING PATHWAYS USING BILIVERDIN REDUCTASE | | | | | | | | |
| APPLICANT(S) FOR DO/EO/US MAINES, Mahin D. | | | | | | | | |
| Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information: | | | | | | | | |
| $\overline{\mathbf{X}}$ This is a FIRST submission of items concerning a submission under 35 U.S.C. 371. | | | | | | | | |
| This is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371. | | | | | | | | |
| This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below. | | | | | | | | |
| The US has been elected (Article 31). | | | | | | | | |
| A copy of the International Application as filed (35 U.S.C. 371(c)(2)) | | | | | | | | |
| a. is attached hereto (required only if not communicated by the International Bureau). | | | | | | | | |
| b has been communicated by the International Bureau. | | | | | | | | |
| | c. X is not required, as the application was filed in the United States Receiving Office (RO/US). | | | | | | | |
| An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). | | | | | | | | |
| | a. is attached hereto. | | | | | | | |
| | b. has been previously submitted under 35 U.S.C. 154(d)(4). | | | | | | | |
| | [] | | | | | | | |
| b. have been communicated by the International Bureau. | a. — are attached hereto (required only if not communicated by the International Bureau). | | | | | | | |
| c. have not been made; however, the time limit for making such amendments has NOT expired. | | | | | | | | |
| d. have not been made and will not be made. | | | | | | | | |
| 8. An English language translation of the amendments to the claims under PCT Art | An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). | | | | | | | |
| 9. An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). | An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). | | | | | | | |
| 10. An English language translation of the annexes of the International Preliminary E Article 36 (35 U.S.C. 371(c)(5)). | An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). | | | | | | | |
| Items 11 to 20 below concern document(s) or information included: | | | | | | | | |
| 11. An Information Disclosure Statement under 37 CFR 1.97 and 1.98. | | | | | | | | |
| | An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. | | | | | | | |
| A preliminary amendment. | | | | | | | | |
| 14. X An Application Data Sheet under 37 CFR 1.76. | | | | | | | | |
| 15. A substitute specification. 16. A power of attorney and/or change of address letter. | | | | | | | | |
| A power of attorney and/or change of address letter. | | | | | | | | |
| 17. A computer-readable form of the sequence listing in accordance with PCT Rule 1 | A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821- 1.825. | | | | | | | |
| 18. A second copy of the published International Application under 35 U.S.C. 154(d)(| A second copy of the published International Application under 35 U.S.C. 154(d)(4). | | | | | | | |
| 19. A second copy of the English language translation of the international application | under 35 U.S.C. 154(d)(4). | | | | | | | |

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the complete form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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| | 10N NO. (if known, | | INTERNATIONAL AP | | ATTORNEY'S DOCKET NUMBER 176/61623 | |
|---|---|---|--|---------------------------|---------------------------------------|----------------|
| 20. Other in UNSIGNED Petition For I CFR 1.137(b | tems or information Combined Dec Revival Of An I | n: laration and Po | wer of Attorney; pplication For Patent Desi | gnating The U.S. A | Abandonded Unintention | onallyUnder 37 |
| Check for Petition Fee The following fees have been submitted | | | | CALCULATIONS PTO USE ONLY | | |
| 21. X Basic national fee (37 CFR 1.492(a)) | | | \$ 300.00 | | | |
| 22. X Examination fee (37 CFR 1.492(c)) If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)\$0 All other situations | | | | | \$ 200.00 |) |
| 23. X Search fee (37 CFR 1.492(b)) If the written opinion of the ISA/US or the International preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)\$0 Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority | | | \$ 100.00 | | | |
| TOTAL OF 21, 22 and 23 = | | | 600.00 |) | | |
| sequence electronic The fee is Total Sheets | elisting in complia c medium) (37 CFI \$250 for each ad Extra Sheets | Number of each additional 50 or fraction thereof thereof (round up to a whole number) | | | \$ 250.00 | |
| $122_{-100} = 22_{/50} = 1_{x $250}$ Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or dedaration after the date of commencement of the national stage (37 CFR 1.492(h)). | | | | \$ 130.00 | T | |
| CLAIMS | NUMB | R FILED NUMBER EXTRA RATE | | \$ | · · · · · · · · · · · · · · · · · · · | |
| Total claims | 29 | - 20 = | 9 | × \$ 50 | \$ 450.00 | |
| Independent clain | ns 2 | - 3 = | 0 | x \$200 | \$ 0.00 | |
| MULTIPLE DEPENDENT CLAIM(S) (if applicable) + \$360 | | | | \$ 0.00 | | |
| TOTAL OF ABOVE CALCULATIONS = | | | | \$ 1,430.00 | | |
| Applicant daims small entity status. See 37 CFR 1.27. Fees above are reduced by ½. | | | 715.00 | | | |
| SUBTOTAL = | | | \$ 715.00 | | | |
| Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)). | | | \$ | 0.00 | | |
| TOTAL NATIONAL FEE = | | | \$ 715.00 | | | |
| | | | 1.21(h)). The assignment mus | st be accompanied + | \$ | 0.00 |
| TOTAL FEES ENCLOSED = | | | \$ 715.00 | | | |
| | | | | | Amount to be refunded: | \$ |
| | | | | . <u>.</u> | Amount to be charged | \$ |

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a. X A check in the amount of \$ _ 715.00 to cover the above fees is enclosed. Please charge my Deposit Account No. in the amount of \$_ _____ to cover the above fees. A duplicate copy of this sheet is enclosed. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. ____14-1138____. A duplicate copy of this sheet is end osed. _. A duplicate copy of this sheet is endosed. Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038. NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status. SEND ALL CORRESPONDENCE TO: Edwin V. Merkel Nixon Peabody LLP Edwin V. Merkel Clinton Square, P.O. Box 31051 NAME Rochester, NY 14603-1051 40,087 United States of America **REGISTRATION NUMBER**

(AP20 Res'd 751/710 29 JUN 2006

EXPRESS MAIL CERTIFICATE

DOCKET NO.: 176/61623 (1208)

APPLICANT:

Mahin D. Maines

TITLE:

METHODS OF MODULATING CELL CYCLE AND CELL SIGNALING

PATHWAYS USING BILIVERDIN REDUCTASE

Certificate is attached to the Transmittal Letter (3 pages) to the U.S. Designated/Elected Office (DO/EO/US) of the above-named application.

"EXPRESS MAIL" NUMBER: EV685740783US

June 29, 2006 DATE OF DEPOSIT:

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to Mail Stop: PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

> Patricia Knisley (Typed or printed name of person mailing paper or fee)

paper or fee)